Success With Azaleas

By WM. C. FRIERSON

Azaleas are quite different in their requirements from ordinary shrubs and evergreens. Their demands are simple, but exacting. Rigid adherence to the sevenfold law of azalea culture will pay well in the vigor and beauty of these lovely plants. The best varieties of Evergreen Azaleas for the Piedmont Section of the Eastern United States are the Kurumes (early) and Kaempferi (later and larger), and Macranthas (latest and dwarfest).

1. LOOSE SOIL. Good top-soil mixed with wood's earth, and thoroughly pulverized to a depth of 10 to 15 inches, will suffice. Azaleas do better in a bed rather than a plant stuck here and there. Where the top-soil has washed off excavate to a depth of 12 to 18 inches and fill in with good, rich soil.

More than anything else the soil needs humus—vegetable matter—such as leaf-mold, decaying leaves, twigs, roots, stubble, etc. Rich soil from a garden corner, wooded ditch-bank, or fertile field is usually high in humus content. An excellent way is to prepare the bed well, then spread 2 or 3 inches of granulated peat-moss, Florida humus, or well decayed compost (see ACID SOIL), and mix well into the first 6 inches of the soil. This adds food and acidity (except the compost), causes iron minerals to form, retains moisture, makes the soil loose, spongy, and friable, and causes beneficial bacterial action, etc.

2. ACID SOIL. Azaleas abhor lime, and soils that are alkaline (sweet). They thrive in acid (sour) soil. Ideally the acidity of the soil should be between pH 4.5 and 5.0. Your agricultural agent will advise you how to have soil tests made. The tests are free. In the Piedmont Section the acidity of the soil is between pH 5.5 and 6.0. Good unlimed soil in this area will grow azaleas, but they will be more thrifty if chemicals are added to the soil to increase the acidity. GRANULATED ALUM (used

by filtering plants) broadcast lightly on the bed and raked just under the surface is excellent. FINELY GROUND SULPHUR incorporated in the soil at the rate of 3 lbs. per 100 sq. ft. (less if a lot of wood's earth is used, or if the soil is more acid as mountain and coastal lands) is adequate for Piedmont soils. ALUMINUM SULPHATE, if available, is a good acidifying agent.

COPPERAS is perhaps the best acidifier. If your azalea leaves turn yellowish during the growing season, it is a sign that they lack acid or iron, or COPPERAS provides both. COPPERAS (ferrous sulphate) is greenish-yellow, and must not be confused with copper sulphate (bluestone) which is fatal to plants. Mix COPPERAS in the proportion of 2 lbs. to 100 gals. of water (1 teaspoon to 2 gals.) and thoroughly soak the ground with this solution by sprinkling on the plants. The vellowing leaves will turn green within a few days (a mulch of fresh shavings turns gray).

Use only ACID FERTILIZERS (never alkaline). COTTONSEED MEAL, lightly sprinkled around the plants is excellent. Too much will kill them. The more used the more watering in dry seasons will be required. A MORE BALANCED FERTIL-IZER is a mixture of 10 lbs. of cottonseed meal (or tankage), 4 lbs. of superphosphate (acid), and 2 lbs. of sulphate (or muriate) of potash. Apply in the spring at the ratio of 1/8 to 1/4 lbs. per sq. yd. or 2 lbs. per 100 sq. ft. If this is broadcast over the azaleas, wash off immediately with sprinkler. It is wise to mix chemicals in the soil and wait ten days after a rain (or soaking) before planting, because the chemical reaction after wetting may burn This is particularly true of small azaleas, and with cottonseed meal.

NO CHEMICAL FERTILIZER CAN TAKE THE PLACE OF ACID PEAT OR HUMUS. The more you use the more humus you need in the soil. Well rotted dairy compost (3 years old) is ideal in very acid soil, but compost is alkaline and needs to be counteracted with plenty of acidifying agents, as alum or superphosphate (the latter could be used in breaking down the compost). One could use vinegar diluted in water and soak the beds. The thriftiest azaleas the writer has seen were in a plot 25 x 50 ft. on which 600 lbs. of Florida humus, 200 lbs, of granulated peat-moss, 100 lbs. of cottonseed meal, and 20 lbs. of granulated alum had been worked into the soil before planting. A heavy peat mulch followed.

- 3. MULCH. Use only an ACID MULCH. A good mulch is the most important item in azalea culture. It is absolutely necessary. Azaleas WILL NOT SUCCEED WITHOUT IT. The following make good mulches: peat-moss, Florida humus, spent tanbark (from a tannery), oak leaves, pine needles, old or fresh shavings (oak or pine), sawdust (preferably old), peanut hulls, etc. Maple leaves are alkaline and therefore objectionable. Next to peat, oak materials are best. Immediately after planting, smooth the beds carefully and spread the material used for a mulch evenly over the entire bed to a depth of 2-6 inches. Never remove. Replenish when necessary. A good mulch keeps the azalea roots cool, keeps the soil porous, aerated, moist, and acid (as the acid in the mulch breaks down), and helps to control weeds.
- 4. WATER. In nature azaleas are never found in dry regions. They like plenty of moisture on both leaves and roots. Newly planted azaleas do best with a daily sprinkling and a weekly soaking during the first summer. Watering can scarcely be overdone. It is important during hot, dry, windy weather.

POTTED PLANTS placed inside the home should be kept away from heat and drafts, and should be frequently watered. If kept inside more than a week they should have a daily sunning (half an hour or more early in the morning) and sprinkling. Set the pot in a saucer of water every few days for about 20 minutes. When set outside plant the same depth as before; the mulch will cause

them to be a little deeper than before.

5. HALF SHADE. Azaleas do best under trees (as oaks, elms, hickories, pines, etc., instead of maples and trees with many spreading roots), where the sun can filter in alternately. Never plant within 2 or 3 feet of a building, and give them a northern or eastern exposure. Heat from rocks, or brick or stone walls is injurious. It is best to plant evergreens against the walls and the azaleas in front of them. Half-shade makes them thriftier, but they will succeed in any location (hot sun) if properly planted, mulched, and watered. More watering is necessary if they are exposed to the afternoon sun,

and the blossoms fade sooner than in half-shade. The hotter the spot, the more need for HUMUS in the soil.

6. WINDBREAK. Azaleas dislike wind—particularly a cold, hot or dry wind—and therefore they should have some protection on one side from prevailing winds, such as a wall, a hedge, evergreens, or anything to break the force of the wind.

This is more essential in colder climates.

7. NO CULTIVATION. Since their fine root system is near the surface of the soil (usually between the soil and the mulch), azaleas cannot be cultivated. Cultivation tears the roots and the plants die. Some nurseries cultivate the mulch occasionally, but take care not to cultivate the roots. This is necessary with a sawdust mulch which packs. Do not cultivate the soil at all, but hand-pull the weeds after a rain or watering, when they slip out easily. Do not pack the soil by trampling on your beds.

DISEASES. Azalea Flower-spot is not to be feared in zones where winter freezes occur. freezes kill it out the first year. It plays havoc however in southern coastal regions. Azalea Gall is a fungus disease easily recognized in the early spring when new growth begins by the appearance of green, whitish, or brown protuberances of a peculiar fleshy growth. It is not serious, but the galls should be plucked off and burned and the plants sprayed with Bordeaux mixture, or dusted with fine sulphur, or any good fungicide. In the Southern mountains these galls were mistaken for fruit, and were regarded as "honeysuckles", and when pickled were eaten as a delicacy. Hence, arose the name "honeysuckles" for native azaleas. When leaf-spot or leaf-scorch, or anything suspicious, appears, spray with Bordeaux.

CAMELLIAS, HOLLIES, and RHODODEN-

DRONS thrive under similar care.

LITERATURE. "AZALEAS Kinds and Culture" by H. Harold Hume is an excellent book (\$3.75)—available from The Macmillan Company, N. Y.

FRIERSON'S FLOWERS

DENMARK, SOUTH CAROLINA